



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

[mail@szabo-scandic.com](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

# Sidekick-1 siRNA (m): sc-153459

## BACKGROUND

Cell adhesion molecules influence cell growth, differentiation, embryogenesis, immune response and cancer metastasis by networking information from the extracellular matrix to the cell. Sidekick-1 (SDK1) is a 2,213 amino acid single-pass membrane protein that functions as a cell adhesion molecule by guiding axonal terminals to specific synapses in developing neurons. Existing as three alternatively spliced isoforms, Sidekick-1 is expressed in retinal neurons and contains 13 fibronectin type-III domains and 6 Ig-like C2-type (immunoglobulin-like) domains. Sidekick-1 expression is upregulated in glomeruli of patients with HIV-associated nephropathy, where it leads to podocyte dysfunction. The gene encoding Sidekick-1 maps to human chromosome 7p22.2 and murine chromosome 5 G2.

## REFERENCES

1. Yamagata, M., Weiner, J.A. and Sanes, J.R. 2002. Sidekicks: synaptic adhesion molecules that promote lamina-specific connectivity in the retina. *Cell* 110: 649-660.
2. Kaufman, L., Hayashi, K., Ross, M.J., Ross, M.D. and Klotman, P.E. 2004. Sidekick-1 is upregulated in glomeruli in HIV-associated nephropathy. *J. Am. Soc. Nephrol.* 15: 1721-1730.
3. Kaufman, L., Yang, G., Hayashi, K., Ashby, J.R., Huang, L., Ross, M.J., Klotman, M.E. and Klotman, P.E. 2007. The homophilic adhesion molecule Sidekick-1 contributes to augmented podocyte aggregation in HIV-associated nephropathy. *FASEB J.* 21: 1367-1375.
4. Yamagata, M. and Sanes, J.R. 2008. Dscam and Sidekick proteins direct lamina-specific synaptic connections in vertebrate retina. *Nature* 451: 465-469.
5. Online Mendelian Inheritance in Man, OMIM<sup>™</sup>. 2008. Johns Hopkins University, Baltimore, MD. MIM Number: 607216. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
6. Oguri, M., Kato, K., Yokoi, K., Yoshida, T., Watanabe, S., Metoki, N., Yoshida, H., Satoh, K., Aoyagi, Y., Nozawa, Y. and Yamada, Y. 2010. Assessment of a polymorphism of SDK1 with hypertension in Japanese Individuals. *Am. J. Hypertens.* 23: 70-77.
7. Kaufman, L., Potla, U., Coleman, S., Dikiy, S., Hata, Y., Kurihara, H., He, J.C., D'Agati, V.D. and Klotman, P.E. 2010. Up-regulation of the homophilic adhesion molecule Sidekick-1 in podocytes contributes to glomerulosclerosis. *J. Biol. Chem.* 285: 25677-25685.

## CHROMOSOMAL LOCATION

Genetic locus: Sdk1 (mouse) mapping to 5 G2.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.

## PRODUCT

Sidekick-1 siRNA (m) is a pool of 3 target-specific 19-25 nt siRNAs designed to knock down gene expression. Each vial contains 3.3 nmol of lyophilized siRNA, sufficient for a 10  $\mu$ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see Sidekick-1 shRNA Plasmid (m): sc-153459-SH and Sidekick-1 shRNA (m) Lentiviral Particles: sc-153459-V as alternate gene silencing products.

For independent verification of Sidekick-1 (m) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-153459A, sc-153459B and sc-153459C.

## STORAGE AND RESUSPENSION

Store lyophilized siRNA duplex at -20° C with desiccant. Stable for at least one year from the date of shipment. Once resuspended, store at -20° C, avoid contact with RNAses and repeated freeze thaw cycles.

Resuspend lyophilized siRNA duplex in 330  $\mu$ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330  $\mu$ l of RNase-free water makes a 10  $\mu$ M solution in a 10  $\mu$ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

## APPLICATIONS

Sidekick-1 siRNA (m) is recommended for the inhibition of Sidekick-1 expression in mouse cells.

## SUPPORT REAGENTS

For optimal siRNA transfection efficiency, Santa Cruz Biotechnology's siRNA Transfection Reagent: sc-29528 (0.3 ml), siRNA Transfection Medium: sc-36868 (20 ml) and siRNA Dilution Buffer: sc-29527 (1.5 ml) are recommended. Control siRNAs or Fluorescein Conjugated Control siRNAs are available as 10  $\mu$ M in 66  $\mu$ l. Each contain a scrambled sequence that will not lead to the specific degradation of any known cellular mRNA. Fluorescein Conjugated Control siRNAs include: sc-36869, sc-44239, sc-44240 and sc-44241. Control siRNAs include: sc-37007, sc-44230, sc-44231, sc-44232, sc-44233, sc-44234, sc-44235, sc-44236, sc-44237 and sc-44238.

## RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor Sidekick-1 gene expression knockdown using RT-PCR Primer: Sidekick-1 (m)-PR: sc-153459-PR (20  $\mu$ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.